

WHAT IS CLAIMED IS:

1. A broadcast wave receiving apparatus, comprising:
first and second tuning circuits each having a resonance frequency;
5 first controlling means for controlling one of said first and second tuning circuits to ensure that said resonance frequency of one of said first and second tuning circuits is tuned to a specific frequency before allowing one of said first and second tuning circuits to detect a broadcast wave at said specific frequency;
judging means for judging whether or not to receive said broadcast wave
10 detected by one of said first and second tuning circuits on the basis of predetermined threshold information on said broadcast waves; and
second controlling means for controlling the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of
15 said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits in response to the judgment of said judging means.
2. A broadcast wave receiving apparatus as set forth in claim 1, in which said
20 first and second tuning circuits each includes electric field intensity detecting means for detecting said electric field intensity of said broadcast wave at said specific frequency, which further comprises electric field intensity judging means for judging whether or not said electric field intensity of said broadcast wave detected at said specific frequency by said electric field intensity detecting means of one of said first
25 and second tuning circuits is smaller than a predetermined threshold level, and in which said second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative
30 of said broadcast wave detected by one of said first and second tuning circuits under the condition that the judgment is made that said electric field intensity of said broadcast wave which is oscillated at said specific frequency is larger than said predetermined threshold level.
- 35 3. A broadcast wave receiving apparatus as set forth in claim 1, in which said first and second tuning circuits each includes multi-path detecting means for detecting

a multi-path noise at said specific frequency, which further comprises multi-path judging means for judging whether or not said multi-path noise detected at said specific frequency by said multi-path detecting means of one of said first and second tuning circuits is smaller than a predetermined threshold level, and in which said
5 second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by one of said first and second tuning circuits under the
10 condition that the judgment is made that said multi-path noise detected at said specific frequency by said multi-path detecting means of one of said first and second tuning circuits is smaller than said predetermined threshold level.

4. A broadcast wave receiving apparatus as set forth in claim 1, in which said
15 first and second tuning circuits each includes mutual interference detecting means for detecting mutual interference noise at said specific frequency, which further comprises mutual interference judging means for judging whether or not said mutual interference noise detected at said specific frequency by said mutual interference detecting means of one of said first and second tuning circuits is smaller than a
20 predetermined threshold level, and in which said second controlling means is adapted to control the other of said first and second tuning circuits to ensure that said resonance frequency of the other of said first and second tuning circuits is tuned to said specific frequency before allowing the other of said first and second tuning circuits to produce a broadcast signal indicative of said broadcast wave detected by
25 one of said first and second tuning circuits under the condition that the judgment is made that said mutual interference noise detected at said specific frequency by said mutual interference detecting means of one of said first and second tuning circuits is smaller than said predetermined threshold level.

30 5. A broadcast wave receiving apparatus as set forth in claim 1, which is installed in an automotive vehicle.